Release notes for ENDF/B Development n-014_Si_030 evaluation

April 26, 2017

- `checkr` Warnings:

    1. A previous error halted parsing of the current section
    MAT=1431, MF= 1, MT=451 (1): Parsing stopped

    ```
    ERROR(S) FOUND IN MAT=1431, MF= 1, MT=451
        SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER      387 TO     522
    ```

- `checkr` Errors:

    1. A variable is outside the allowed ENDF range
    MAT=1431, MF= 1, MT=451 (0): Variable range

    ```
    ERROR(S) FOUND IN MAT=1431, MF= 1, MT=451
        MOD =     2 OUT OF RANGE     0 -     0          RECORD NUMBER     387
    ```

    2. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 2, MT=151 (0): Directory (b)

    ```
    ERROR(S) FOUND IN MAT=1431, MF= 2, MT=151
        SECTION  2/151 NOT IN DIRECTORY               RECORD NUMBER     524
    ```

    3. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 1 (0): Directory (b)

    ```
    ERROR(S) FOUND IN MAT=1431, MF= 3, MT=  1
        SECTION  3/  1 NOT IN DIRECTORY               RECORD NUMBER     562
    ```

    4. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 2 (0): Directory (b)

    ```
    ERROR(S) FOUND IN MAT=1431, MF= 3, MT=  2
        SECTION  3/  2 NOT IN DIRECTORY               RECORD NUMBER    1318
    ```

    5. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 3 (0): Directory (b)

    ```
    ERROR(S) FOUND IN MAT=1431, MF= 3, MT=  3
        SECTION  3/  3 NOT IN DIRECTORY               RECORD NUMBER    2074
    ```

    6. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 4 (0): Directory (b)

    ```
    ERROR(S) FOUND IN MAT=1431, MF= 3, MT=  4
        SECTION  3/  4 NOT IN DIRECTORY               RECORD NUMBER    2152
    ```

    7. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 5 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=  5
          SECTION  3/  5 NOT IN DIRECTORY              RECORD NUMBER    2167
```

8. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=1431, MF= 3, MT= 16 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT= 16
          SECTION  3/ 16 NOT IN DIRECTORY              RECORD NUMBER    2225
```

9. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=1431, MF= 3, MT= 22 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT= 22
          SECTION  3/ 22 NOT IN DIRECTORY              RECORD NUMBER    2233
```

10. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 28 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT= 28
          SECTION  3/ 28 NOT IN DIRECTORY              RECORD NUMBER    2240
```

11. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 51 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT= 51
          SECTION  3/ 51 NOT IN DIRECTORY              RECORD NUMBER    2247
```

12. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 52 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT= 52
          SECTION  3/ 52 NOT IN DIRECTORY              RECORD NUMBER    2260
```

13. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 53 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT= 53
          SECTION  3/ 53 NOT IN DIRECTORY              RECORD NUMBER    2272
```

14. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 54 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT= 54
          SECTION  3/ 54 NOT IN DIRECTORY              RECORD NUMBER    2284
```

15. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 55 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT= 55
          SECTION  3/ 55 NOT IN DIRECTORY                RECORD NUMBER    2296
```

16. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 56 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT= 56
          SECTION  3/ 56 NOT IN DIRECTORY                RECORD NUMBER    2307
```

17. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT= 91 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT= 91
          SECTION  3/ 91 NOT IN DIRECTORY                RECORD NUMBER    2318
```

18. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=102 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=102
          SECTION  3/102 NOT IN DIRECTORY                RECORD NUMBER    2329
```

19. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=103 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=103
          SECTION  3/103 NOT IN DIRECTORY                RECORD NUMBER    2341
```

20. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=107 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=107
          SECTION  3/107 NOT IN DIRECTORY                RECORD NUMBER    2352
```

21. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=600 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=600
          SECTION  3/600 NOT IN DIRECTORY                RECORD NUMBER    2367
```

22. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=601 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=601
          SECTION  3/601 NOT IN DIRECTORY                RECORD NUMBER    2376
```

23. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=602 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF= 3, MT=602
   SECTION  3/602 NOT IN DIRECTORY                  RECORD NUMBER    2385
```

24. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=603 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF= 3, MT=603
   SECTION  3/603 NOT IN DIRECTORY                  RECORD NUMBER    2393
```

25. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=604 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF= 3, MT=604
   SECTION  3/604 NOT IN DIRECTORY                  RECORD NUMBER    2401
```

26. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=605 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF= 3, MT=605
   SECTION  3/605 NOT IN DIRECTORY                  RECORD NUMBER    2409
```

27. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=649 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF= 3, MT=649
   SECTION  3/649 NOT IN DIRECTORY                  RECORD NUMBER    2417
```

28. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=800 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF= 3, MT=800
   SECTION  3/800 NOT IN DIRECTORY                  RECORD NUMBER    2425
```

29. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=801 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF= 3, MT=801
   SECTION  3/801 NOT IN DIRECTORY                  RECORD NUMBER    2436
```

30. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=802 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF= 3, MT=802
   SECTION  3/802 NOT IN DIRECTORY                  RECORD NUMBER    2446
```

31. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=803 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=803
           SECTION  3/803 NOT IN DIRECTORY                    RECORD NUMBER    2456
```

32. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=804 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=804
           SECTION  3/804 NOT IN DIRECTORY                    RECORD NUMBER    2465
```

33. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=805 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=805
           SECTION  3/805 NOT IN DIRECTORY                    RECORD NUMBER    2474
```

34. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=806 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=806
           SECTION  3/806 NOT IN DIRECTORY                    RECORD NUMBER    2482
```

35. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=807 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=807
           SECTION  3/807 NOT IN DIRECTORY                    RECORD NUMBER    2490
```

36. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=808 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=808
           SECTION  3/808 NOT IN DIRECTORY                    RECORD NUMBER    2498
```

37. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=809 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=809
           SECTION  3/809 NOT IN DIRECTORY                    RECORD NUMBER    2506
```

38. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=810 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 3, MT=810
           SECTION  3/810 NOT IN DIRECTORY                    RECORD NUMBER    2514
```

39. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=811 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=1431, MF= 3, MT=811
            SECTION  3/811 NOT IN DIRECTORY                  RECORD NUMBER    2522
```

40. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 3, MT=849 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=1431, MF= 3, MT=849
            SECTION  3/849 NOT IN DIRECTORY                  RECORD NUMBER    2530
```

41. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 4, MT= 2 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=1431, MF= 4, MT=  2
            SECTION  4/  2 NOT IN DIRECTORY                  RECORD NUMBER    2538
```

42. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 5 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=1431, MF= 6, MT=  5
            SECTION  6/  5 NOT IN DIRECTORY                  RECORD NUMBER    4064
```

43. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 16 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 16
            SECTION  6/ 16 NOT IN DIRECTORY                  RECORD NUMBER   15801
```

44. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 22 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 22
            SECTION  6/ 22 NOT IN DIRECTORY                  RECORD NUMBER   16018
```

45. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 28 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 28
            SECTION  6/ 28 NOT IN DIRECTORY                  RECORD NUMBER   16231
```

46. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 51 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 51
            SECTION  6/ 51 NOT IN DIRECTORY                  RECORD NUMBER   16398
```

47. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 52 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 52
         SECTION  6/ 52 NOT IN DIRECTORY                RECORD NUMBER   16468
```

48. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 53 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 53
         SECTION  6/ 53 NOT IN DIRECTORY                RECORD NUMBER   16529
```

49. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 54 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 54
         SECTION  6/ 54 NOT IN DIRECTORY                RECORD NUMBER   16593
```

50. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 55 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 55
         SECTION  6/ 55 NOT IN DIRECTORY                RECORD NUMBER   16660
```

51. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 56 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 56
         SECTION  6/ 56 NOT IN DIRECTORY                RECORD NUMBER   16716
```

52. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT= 91 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 91
         SECTION  6/ 91 NOT IN DIRECTORY                RECORD NUMBER   16773
```

53. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=600 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF= 6, MT=600
         SECTION  6/600 NOT IN DIRECTORY                RECORD NUMBER   17699
```

54. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=601 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF= 6, MT=601
         SECTION  6/601 NOT IN DIRECTORY                RECORD NUMBER   17739
```

55. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=602 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=1431, MF= 6, MT=602
        SECTION  6/602 NOT IN DIRECTORY                    RECORD NUMBER   17776
```

56. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=603 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=1431, MF= 6, MT=603
        SECTION  6/603 NOT IN DIRECTORY                    RECORD NUMBER   17812
```

57. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=604 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=1431, MF= 6, MT=604
        SECTION  6/604 NOT IN DIRECTORY                    RECORD NUMBER   17849
```

58. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=605 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=1431, MF= 6, MT=605
        SECTION  6/605 NOT IN DIRECTORY                    RECORD NUMBER   17883
```

59. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=649 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=1431, MF= 6, MT=649
        SECTION  6/649 NOT IN DIRECTORY                    RECORD NUMBER   17915
```

60. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=800 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=1431, MF= 6, MT=800
        SECTION  6/800 NOT IN DIRECTORY                    RECORD NUMBER   18258
```

61. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=801 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=1431, MF= 6, MT=801
        SECTION  6/801 NOT IN DIRECTORY                    RECORD NUMBER   18321
```

62. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=802 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=1431, MF= 6, MT=802
        SECTION  6/802 NOT IN DIRECTORY                    RECORD NUMBER   18376
```

63. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=803 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF= 6, MT=803
        SECTION  6/803 NOT IN DIRECTORY                    RECORD NUMBER   18427
```

64. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=804 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF= 6, MT=804
        SECTION  6/804 NOT IN DIRECTORY                    RECORD NUMBER   18475
```

65. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=805 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF= 6, MT=805
        SECTION  6/805 NOT IN DIRECTORY                    RECORD NUMBER   18517
```

66. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=806 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF= 6, MT=806
        SECTION  6/806 NOT IN DIRECTORY                    RECORD NUMBER   18557
```

67. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=807 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF= 6, MT=807
        SECTION  6/807 NOT IN DIRECTORY                    RECORD NUMBER   18600
```

68. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=808 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF= 6, MT=808
        SECTION  6/808 NOT IN DIRECTORY                    RECORD NUMBER   18641
```

69. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=809 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF= 6, MT=809
        SECTION  6/809 NOT IN DIRECTORY                    RECORD NUMBER   18680
```

70. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=810 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF= 6, MT=810
        SECTION  6/810 NOT IN DIRECTORY                    RECORD NUMBER   18716
```

71. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=811 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 6, MT=811
          SECTION  6/811 NOT IN DIRECTORY                   RECORD NUMBER   18755
```

72. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF= 6, MT=849 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF= 6, MT=849
          SECTION  6/849 NOT IN DIRECTORY                   RECORD NUMBER   18792
```

73. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT= 51 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT= 51
          SECTION 12/ 51 NOT IN DIRECTORY                   RECORD NUMBER   19174
```

74. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT= 52 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT= 52
          SECTION 12/ 52 NOT IN DIRECTORY                   RECORD NUMBER   19178
```

75. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT= 53 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT= 53
          SECTION 12/ 53 NOT IN DIRECTORY                   RECORD NUMBER   19182
```

76. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT= 54 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT= 54
          SECTION 12/ 54 NOT IN DIRECTORY                   RECORD NUMBER   19186
```

77. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT= 55 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT= 55
          SECTION 12/ 55 NOT IN DIRECTORY                   RECORD NUMBER   19190
```

78. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT= 56 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT= 56
          SECTION 12/ 56 NOT IN DIRECTORY                   RECORD NUMBER   19195
```

79. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF=12, MT=102
    SECTION 12/102 NOT IN DIRECTORY              RECORD NUMBER   19199
```

80. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=601 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF=12, MT=601
    SECTION 12/601 NOT IN DIRECTORY              RECORD NUMBER   19303
```

81. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=602 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF=12, MT=602
    SECTION 12/602 NOT IN DIRECTORY              RECORD NUMBER   19307
```

82. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=603 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF=12, MT=603
    SECTION 12/603 NOT IN DIRECTORY              RECORD NUMBER   19311
```

83. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=604 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF=12, MT=604
    SECTION 12/604 NOT IN DIRECTORY              RECORD NUMBER   19315
```

84. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=605 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF=12, MT=605
    SECTION 12/605 NOT IN DIRECTORY              RECORD NUMBER   19319
```

85. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=801 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF=12, MT=801
    SECTION 12/801 NOT IN DIRECTORY              RECORD NUMBER   19323
```

86. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=802 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1431, MF=12, MT=802
    SECTION 12/802 NOT IN DIRECTORY              RECORD NUMBER   19327
```

87. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=803 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT=803
          SECTION 12/803 NOT IN DIRECTORY                    RECORD NUMBER    19331
```

88. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=804 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT=804
          SECTION 12/804 NOT IN DIRECTORY                    RECORD NUMBER    19335
```

89. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=805 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT=805
          SECTION 12/805 NOT IN DIRECTORY                    RECORD NUMBER    19339
```

90. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=806 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT=806
          SECTION 12/806 NOT IN DIRECTORY                    RECORD NUMBER    19344
```

91. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=807 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT=807
          SECTION 12/807 NOT IN DIRECTORY                    RECORD NUMBER    19348
```

92. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=808 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT=808
          SECTION 12/808 NOT IN DIRECTORY                    RECORD NUMBER    19352
```

93. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=809 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT=809
          SECTION 12/809 NOT IN DIRECTORY                    RECORD NUMBER    19356
```

94. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=810 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=12, MT=810
          SECTION 12/810 NOT IN DIRECTORY                    RECORD NUMBER    19360
```

95. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=12, MT=811 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF=12, MT=811
         SECTION 12/811 NOT IN DIRECTORY              RECORD NUMBER   19365
```

96. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT= 51 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF=14, MT= 51
         SECTION 14/ 51 NOT IN DIRECTORY              RECORD NUMBER   19371
```

97. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT= 52 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF=14, MT= 52
         SECTION 14/ 52 NOT IN DIRECTORY              RECORD NUMBER   19373
```

98. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT= 53 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF=14, MT= 53
         SECTION 14/ 53 NOT IN DIRECTORY              RECORD NUMBER   19375
```

99. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT= 54 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF=14, MT= 54
         SECTION 14/ 54 NOT IN DIRECTORY              RECORD NUMBER   19377
```

100. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT= 55 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF=14, MT= 55
         SECTION 14/ 55 NOT IN DIRECTORY              RECORD NUMBER   19379
```

101. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT= 56 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF=14, MT= 56
         SECTION 14/ 56 NOT IN DIRECTORY              RECORD NUMBER   19381
```

102. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT=102 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=1431, MF=14, MT=102
         SECTION 14/102 NOT IN DIRECTORY              RECORD NUMBER   19383
```

103. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT=601 (0): Directory (b)

13

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=601
           SECTION 14/601 NOT IN DIRECTORY                    RECORD NUMBER    19385
```

104. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT=602 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=602
           SECTION 14/602 NOT IN DIRECTORY                    RECORD NUMBER    19387
```

105. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT=603 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=603
           SECTION 14/603 NOT IN DIRECTORY                    RECORD NUMBER    19389
```

106. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT=604 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=604
           SECTION 14/604 NOT IN DIRECTORY                    RECORD NUMBER    19391
```

107. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT=605 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=605
           SECTION 14/605 NOT IN DIRECTORY                    RECORD NUMBER    19393
```

108. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT=801 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=801
           SECTION 14/801 NOT IN DIRECTORY                    RECORD NUMBER    19395
```

109. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT=802 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=802
           SECTION 14/802 NOT IN DIRECTORY                    RECORD NUMBER    19397
```

110. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT=803 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=803
           SECTION 14/803 NOT IN DIRECTORY                    RECORD NUMBER    19399
```

111. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=14, MT=804 (0): Directory (b)

14

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=804
           SECTION 14/804 NOT IN DIRECTORY                    RECORD NUMBER    19401
```

112. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=1431, MF=14, MT=805 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=805
           SECTION 14/805 NOT IN DIRECTORY                    RECORD NUMBER    19403
```

113. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=1431, MF=14, MT=806 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=806
           SECTION 14/806 NOT IN DIRECTORY                    RECORD NUMBER    19405
```

114. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=1431, MF=14, MT=807 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=807
           SECTION 14/807 NOT IN DIRECTORY                    RECORD NUMBER    19407
```

115. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=1431, MF=14, MT=808 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=808
           SECTION 14/808 NOT IN DIRECTORY                    RECORD NUMBER    19409
```

116. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=1431, MF=14, MT=809 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=809
           SECTION 14/809 NOT IN DIRECTORY                    RECORD NUMBER    19411
```

117. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=1431, MF=14, MT=810 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=810
           SECTION 14/810 NOT IN DIRECTORY                    RECORD NUMBER    19413
```

118. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=1431, MF=14, MT=811 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=14, MT=811
           SECTION 14/811 NOT IN DIRECTORY                    RECORD NUMBER    19415
```

119. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=1431, MF=33, MT= 1 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=1431, MF=33, MT=  1
          SECTION 33/  1 NOT IN DIRECTORY                RECORD NUMBER   19418
```

120. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=1431, MF=33, MT= 2 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=1431, MF=33, MT=  2
          SECTION 33/  2 NOT IN DIRECTORY                RECORD NUMBER   19437
```

121. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=1431, MF=33, MT= 3 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=1431, MF=33, MT=  3
          SECTION 33/  3 NOT IN DIRECTORY                RECORD NUMBER   19453
```

122. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=1431, MF=33, MT= 4 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=1431, MF=33, MT=  4
          SECTION 33/  4 NOT IN DIRECTORY                RECORD NUMBER   19470
```

123. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=1431, MF=33, MT= 16 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=1431, MF=33, MT= 16
          SECTION 33/ 16 NOT IN DIRECTORY                RECORD NUMBER   19480
```

124. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=1431, MF=33, MT= 22 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=1431, MF=33, MT= 22
          SECTION 33/ 22 NOT IN DIRECTORY                RECORD NUMBER   19493
```

125. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=1431, MF=33, MT= 28 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=1431, MF=33, MT= 28
          SECTION 33/ 28 NOT IN DIRECTORY                RECORD NUMBER   19508
```

126. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=1431, MF=33, MT= 51 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=1431, MF=33, MT= 51
          SECTION 33/ 51 NOT IN DIRECTORY                RECORD NUMBER   19521
```

127. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=1431, MF=33, MT= 52 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF=33, MT= 52
      SECTION 33/ 52 NOT IN DIRECTORY                    RECORD NUMBER   19538
```

128. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=33, MT= 53 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF=33, MT= 53
      SECTION 33/ 53 NOT IN DIRECTORY                    RECORD NUMBER   19557
```

129. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=33, MT= 54 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF=33, MT= 54
      SECTION 33/ 54 NOT IN DIRECTORY                    RECORD NUMBER   19574
```

130. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=33, MT= 55 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF=33, MT= 55
      SECTION 33/ 55 NOT IN DIRECTORY                    RECORD NUMBER   19591
```

131. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=33, MT= 56 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF=33, MT= 56
      SECTION 33/ 56 NOT IN DIRECTORY                    RECORD NUMBER   19608
```

132. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=33, MT= 91 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF=33, MT= 91
      SECTION 33/ 91 NOT IN DIRECTORY                    RECORD NUMBER   19625
```

133. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=33, MT=102 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF=33, MT=102
      SECTION 33/102 NOT IN DIRECTORY                    RECORD NUMBER   19640
```

134. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=33, MT=103 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=1431, MF=33, MT=103
      SECTION 33/103 NOT IN DIRECTORY                    RECORD NUMBER   19661
```

135. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=1431, MF=33, MT=107 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=1431, MF=33, MT=107
            SECTION 33/107 NOT IN DIRECTORY                    RECORD NUMBER    19676
```

- `psyche` Warnings:

   1. Strength function in URR not in agreement with PSYCHE's expectations
      *FILE 2 / SECTION 151 / ISOTOPE MASS = 30. L = 0 / STRENGTH FUNCTION
      IS 1.91848E-05 / STRENGTH FUNCTION 1.91848E-05 / LIES OUTSIDE LIMITS
      1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

      ```
      FILE  2
         SECTION 151
             ISOTOPE MASS =  30. L =  0
                       STRENGTH FUNCTION IS  1.91848E-05
                                  STRENGTH FUNCTION 1.91848E-05
      ... [1 more lines]
      ```

- `recent` Warnings:

   1. Statistical weight of certain L values were incorrect
      0: RRR goof (a)

      ```
      Calculate Cross Sections from Resonance Parameters (RECENT 2015-1)
      ==============================================================================
      Retrieval Criteria-----------         MAT
      File 2 Mimimum Cross Section- 1.0000E-10 (Standard Option)
      Reactions with No Background-    Output (Resonance Contribution)
      ... [180 more lines]
      ```

- `fudge-4.0` Warnings:

   1. Cross section does not match sum of linked reaction cross sections
      crossSectionSum label 1: nonelastic (Error # 0): CS Sum.

      ```
      WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.96%
      ```

   2. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical in-
      stability in downstream codes.
      Section 0 (total): / Form 'eval': / Component 1 (Error # 0): Condition num.

      ```
      WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
      ```

   3. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical in-
      stability in downstream codes.
      Section 0 (total): / Form 'eval': / Component 2 (Error # 0): Condition num.

      ```
      WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
      ```

   4. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical in-
      stability in downstream codes.
      Section 0 (total): / Form 'eval': / Component 3 (Error # 0): Condition num.

      ```
      WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
      ```

5. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 0 (total): / Form 'eval': / Component 4 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

6. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 1 (n + Si30): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (3.532870e-18) is too small
```

7. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 2 (nonelastic): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

8. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 2 (nonelastic): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

9. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 2 (nonelastic): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

10. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n[multiplicity:'2'] + Si29 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

11. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n[multiplicity:'2'] + Si29 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

12. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n[multiplicity:'2'] + Si29 + gamma): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

13. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n[multiplicity:'2'] + Si29 + gamma): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

14. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 5 (n + He4 + Mg26 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

15. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 5 (n + He4 + Mg26 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

16. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 5 (n + He4 + Mg26 + gamma): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

17. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 5 (n + He4 + Mg26 + gamma): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

18. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 6 (n + H1 + Al29 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

19. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 6 (n + H1 + Al29 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

20. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 6 (n + H1 + Al29 + gamma): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

21. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 6 (n + H1 + Al29 + gamma): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

22. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 7 (n + Si30_e1): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

23. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 7 (n + Si30_e1): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

24. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 7 (n + Si30_e1): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

25. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 7 (n + Si30_e1): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

26. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 8 (n + Si30_e2): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

27. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 8 (n + Si30_e2): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

28. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 8 (n + Si30_e2): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

29. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 8 (n + Si30_e2): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

30. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 9 (n + Si30_e3): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

31. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 9 (n + Si30_e3): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

32. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
    Section 9 (n + Si30_e3): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

33. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
    Section 9 (n + Si30_e3): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

34. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
    Section 10 (n + Si30_e4): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

35. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
    Section 10 (n + Si30_e4): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

36. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
    Section 10 (n + Si30_e4): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

37. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
    Section 10 (n + Si30_e4): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

38. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
    Section 11 (n + Si30_e5): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

39. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
    Section 11 (n + Si30_e5): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

40. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
    Section 11 (n + Si30_e5): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

41. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 11 (n + Si30_e5): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

42. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 12 (n + Si30_e6): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

43. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 12 (n + Si30_e6): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

44. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 12 (n + Si30_e6): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

45. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 12 (n + Si30_e6): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

46. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 13 (n + (Si30_c ->Si30 + gamma)): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

47. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 13 (n + (Si30_c ->Si30 + gamma)): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

48. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 13 (n + (Si30_c ->Si30 + gamma)): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

49. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 13 (n + (Si30_c ->Si30 + gamma)): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

50. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 14 (Si31 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (1.952097e-17) is too small
```

51. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 14 (Si31 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

52. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 14 (Si31 + gamma): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

53. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 14 (Si31 + gamma): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

54. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 15 ((z,p)): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

55. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 15 ((z,p)): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

56. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 15 ((z,p)): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

57. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 15 ((z,p)): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

58. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 16 ((z,alpha)): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

59. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 16 ((z,alpha)): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

60. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 16 ((z,alpha)): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

61. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 16 ((z,alpha)): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

- `fudge-4.0` Errors:

    1. Calculated and tabulated Q values disagree.
    reaction label 8: n[multiplicity:'2'] + Si29 + gamma (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -10410384.23774719 eV vs -1.061e7 eV!
    ```

    2. Calculated and tabulated Q values disagree.
    reaction label 9: n + H1 + Al29 + gamma (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -13307865.47223663 eV vs -1.3508e7 eV!
    ```

    3. Calculated and tabulated Q values disagree.
    reaction label 10: H1 + Al30 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -7670473.285732269 eV vs -7.7516e6 eV!
    ```

    4. Calculated and tabulated Q values disagree.
    reaction label 11: H1 + Al30_e1 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -7920473.285732269 eV vs -8.0016e6 eV!
    ```

    5. Calculated and tabulated Q values disagree.
    reaction label 12: H1 + Al30_e2 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -8364473.285732269 eV vs -8.4456e6 eV!
    ```

    6. Calculated and tabulated Q values disagree.
    reaction label 13: H1 + Al30_e3 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -8670473.285732269 eV vs -8.7516e6 eV!
    ```

    7. Calculated and tabulated Q values disagree.
    reaction label 14: H1 + Al30_e4 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -8805473.285732269 eV vs -8.8866e6 eV!
    ```

8. Calculated and tabulated Q values disagree.
   reaction label 15: H1 + Al30_e5 (Error # 0): Q mismatch

   `WARNING: Calculated and tabulated Q-values disagree: -8932473.285732269 eV vs -9.0136e6 eV!`

9. Calculated and tabulated Q values disagree.
   reaction label 16: H1 + (Al30_c ->Al30 + gamma) (Error # 0): Q mismatch

   `WARNING: Calculated and tabulated Q-values disagree: -9070473.285732269 eV vs -9.1516e6 eV!`

10. Calculated and tabulated Q values disagree.
    reaction label 17: He4 + Mg27 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: -4902327.931797028 eV vs -4.2002e6 eV!`

11. Energy range of data set does not match cross section range
    *reaction label 17: He4 + Mg27 / Product: He4 / Distribution: / angularTwoBody -
    XYs2d: (Error # 0): Domain mismatch (a)*

    `WARNING: Domain doesn't match the cross section domain: (4341600.0 -> 150000000.0) vs (4341500.0 -> 150000000.0)`

12. Calculated and tabulated Q values disagree.
    reaction label 18: He4 + Mg27_e1 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: -5887327.931797028 eV vs -5.1852e6 eV!`

13. Calculated and tabulated Q values disagree.
    reaction label 19: He4 + Mg27_e2 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: -6600327.931797028 eV vs -5.8982e6 eV!`

14. Calculated and tabulated Q values disagree.
    reaction label 20: He4 + Mg27_e3 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: -6842327.931797028 eV vs -6.1402e6 eV!`

15. Calculated and tabulated Q values disagree.
    reaction label 21: He4 + Mg27_e4 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: -8011327.931797028 eV vs -7.3092e6 eV!`

16. Calculated and tabulated Q values disagree.
    reaction label 22: He4 + Mg27_e5 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: -8329327.931797028 eV vs -7.6272e6 eV!`

17. Calculated and tabulated Q values disagree.
    reaction label 23: He4 + Mg27_e6 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: -8378327.931797028 eV vs -7.6762e6 eV!`

18. Calculated and tabulated Q values disagree.
    reaction label 24: He4 + Mg27_e7 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: -8387327.931797028 eV vs -7.6852e6 eV!`

19. Calculated and tabulated Q values disagree.
    reaction label 25: He4 + Mg27_e8 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -8463327.931797028 eV vs -7.7612e6 eV!
    ```

20. Calculated and tabulated Q values disagree.
    reaction label 26: He4 + Mg27_e9 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -8662327.931797028 eV vs -7.9602e6 eV!
    ```

21. Calculated and tabulated Q values disagree.
    reaction label 27: He4 + Mg27_e10 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -8688327.931797028 eV vs -7.9862e6 eV!
    ```

22. Calculated and tabulated Q values disagree.
    reaction label 28: He4 + Mg27_e11 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -8786327.931797028 eV vs -8.0842e6 eV!
    ```

23. Calculated and tabulated Q values disagree.
    reaction label 29: He4 + (Mg27_c ->Mg27 + gamma) (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -8902327.931797028 eV vs -8.2002e6 eV!
    ```

24. Calculated and tabulated Q values disagree.
    reaction label 30: Si31 + gamma (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: 6323284.205276489 eV vs 6.592e6 eV!
    ```

25. Calculated and tabulated Q values disagree.
    reaction label 31: n + He4 + Mg26 + gamma (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -11281976.75618744 eV vs -1.0644e7 eV!
    ```

26. A summed covariance refers to another which refers back to the first which refers the
    second which refers to the first which refers to the ...
    (Error # 4): Cyclic

    ```
    n-014_Si_030.endf: WARNING: Cyclic dependency in summed covariances for sections /covarianceSuite/section[@label
    ```

- njoy2012   Warnings:

  1. Message comes from several resonance types that do not support the calculation of angu-
     lar distributions. Some of them can be used if `Want_SAMRL_RM` or `Want_SAMRML_BW` are
     true.
     *reconr...reconstruct pointwise cross sections in pendf format (0):   RECONR/calculation
     of angular distribution not installed (0)*

     ```
      ---message from rdf2bw---calculation of angular distribution not installed.
        samm max legendre order:  0
     ```

  2. Evaluation has no unresolved resonance parameters given
     unresr...calculation of unresolved resonance cross sections (0):   No URR

```
            ---message from unresr---mat 1431 has no unresolved parameters
                             copy as is to nout
```

3. Evaluation has no unresolved resonance parameters given
   purr...probabalistic unresolved calculation (0): No URR

```
            ---message from purr---mat 1431 has no unresolved parameters
                             copy as is to nout
```

4. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (0): ACER/check energy distributions (0)

```
      check energy distributions
         consis: ep.gt.epmax 9.359472E-12 with q.lt.0 for (n,x) at e  1.000000E-11 -> 1.000000E-11
```

5. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (1): ACER/check energy distributions (0)

```
      check energy distributions
         consis:  awr.lt.180---this is probably an error.
```

6. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (2): ACER/check energy distributions (0)

```
      check energy distributions
         consis: shifting eprimes greater than epmax and renorming the distribution
```

7. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (3): ACER/check energy distributions (0)

```
      check energy distributions
         consis: ep.gt.epmax 2.059083E+01 with q.lt.0 for (n,x) at e  2.200000E+01 -> 2.104191E+01
```

8. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (4): ACER/check energy distributions (0)

```
      check energy distributions
         consis:  awr.lt.180---this is probably an error.
```

9. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (5): ACER/check energy distributions (0)

```
      check energy distributions
         consis: shifting eprimes greater than epmax and renorming the distribution
```

- `acelst` Warnings:

  1. The incident energy grid is not monotonic for this angular distribution
     0: Bad Ang. Dist.

```
      ACELST WARNING - Processing Ang.Dist.MT          2
                    E-grid non-monotonic   2.000000000E+01 2.000000000E+01
```

- `xsectplotter` Errors:

1. Exception AttributeError was thrown
   /usr/local/lib/python2.7/site-packages/matplotlib-1.5.3-py2.7-linux-x86_64.egg/matplotlib/font_manager.py:2'
   UserWarning: Matplotlib is building the font cache using fc-list. This may take a moment. (Error # 2): AttributeError

   ```
   AttributeError: 'NoneType' object has no attribute 'rowData'
   ```